## FLEXIBLE GOLF TEE

5 CROSS REFERENCES TO RELATED APPLICATIONS: None.

Statement as to rights to inventions made under Federally sponsored research and development: Not applicable.

### BACKGROUND OF THE INVENTION

1. Field of the Invention.

This present invention relates generally to a golf tee, and more particularly, to a flexible golf tee apparatus for supporting a golf ball above the surface of the ground when driving the golf ball. The golf tee of the present invention is designed to allow a golf ball to be driven off the tee with a minimum of friction between the golf tee and golf ball.

2. Brief Description of Prior Art.

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Golf is one of the most widely played sports activities in the United States, as well as outside the United States. Not only is this activity already widespread, but the number of golfers continue to grow due to popularity of the sport.

The sport of golf is typically played on a golf course consisting typically of eighteen holes. A set of golf clubs is used to strike a golf ball in each hole. Each hole has a tee box which defines a starting location of that hole in which a golfer places a golf ball and swings a golf club to strike the ball towards a designated green. Before striking the ball, the golfer often first places a golf tee into the ground and then places a golf ball on the ball-supporting surface of the tee.

It is well known that in hitting a golf ball the most important considerations for all golfers, regardless of skill level, are consistency and reproducibility. Every golfer strives to achieve his personal best through adopting the same stance, same grip, same backswing and same follow-through each time he hits the ball in order to achieve some level of consistency. Golf tees are often overlooked and most golfers are not aware of the importance the tee plays in obtaining a consistently good golf game.

Most golf tees are conventionally made of a rigid plastic or solid wood and most have a circular shaped ball-supporting surface supported by an elongated circular stem. This circular shaped ball-supporting surface can be a major cause of instability. The slight concavity of the surface generally allows for too much surface contact between tee and ball. The movement of the ball across the concave surface will impart a spin to the ball, and quite often it will be an undesirable spin. One known feature of golf ball flight is that the initial spin will determine the initial flight pattern. It is therefore preferable that there exist minimum resistance or friction between the tee and the ball at impact.

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Golf tees have been available in numerous designs, shapes and sizes. A number of prior patents disclose golf tees of various types. Although these provide some improvements over the classic golf tee, the prior art constructions do not provide any functional improvement in avoiding unnecessary frictional interference between ball and tee.

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As will be seen from the subsequent description, the preferred embodiments of the present invention overcome shortcomings of the prior art.

# SUMMARY OF THE INVENTION

One of the major desires for a golfer is to develop a consistent striking of the golf ball. Every golfer is aware of the importance of certain fundamentals such as proper grip and stance, proper backswing and follow-through in order to develop such consistency.

- Golfers spend numerous hours on the practice range hitting golf balls to achieve "muscle memory" in their golf swing, which they hope will carry over to the golf course. Golf tees are often overlooked and most golfers are not aware of the importance the tee plays in obtaining a consistently good golf game. Most golf tees are conventionally made of a rigid plastic or solid wood. The golfer first places the golf tee into the ground and then places a golf ball on the ball-supporting surface of the golf tee. As a result of the overall rigidity of the tee, including the ball-supporting surface of the tee supporting the golf ball, the movement of the ball across the concave surface when the ball is struck will impart a spin to the ball, and guite often it will be an undesirable spin.
- The flexible golf tee of the present invention is designed to flex and absorb the shock at impact with the golf club. As a result, minimizing the resistance or friction between the flexible golf tee and the golf ball at impact. The flexible golf tee generally includes a sleeve member, and a tee member. The sleeve member having a cavity generally shaped and sized to receive a stem portion of the tee member. The sleeve member further includes a pointed base section that is used to insert the flexible golf tee into the ground, and a crimped portion that enables the golf tee to flex or bend at impact. The tee member further includes a circular head portion having a ball-supporting surface which the golf ball is positioned thereon. The stem portion of the tee member is received within the cavity of the sleeve member so that the tee member is supported in a stable, elevated position within the cavity.

#### BRIEF DESCRIPTION OF THE DRAWINGS

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- Fig. 1 is a perspective view of the present invention, a flexible golf tee.
- Fig. 2 is an exploded view of the flexible golf tee of Fig. 1.
- Fig. 3 is a view for explaining the flexible feature of the golf tee of Fig. 1 during use.

## DESCRIPTION OF THE PREFERRED EMBODIMENT

In accordance with the present invention, a flexible golf tee is disclosed. The flexible golf tee is directed to enable a golf ball to be driven off the flexible golf tee with a minimum of friction between the golf tee and the golf ball. Specifically, it will be noted in the drawings that the flexible golf tee relates to an apparatus designed to flex and absorb the shock at impact between the golf ball resting on the flexible golf tee and the golf club. In the broadest context, the flexible golf tee of the present invention consists of components configured and correlated with respect to each other so as to attain the desired objective.

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Figs. 1 - 3 illustrate the preferred embodiment of a flexible golf tee 10 made in accordance with the present invention. A standard golf tee (not shown) generally includes a pointed stem portion that is inserted into the ground when used, and a circular head portion which a golf ball is positioned thereon.

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As shown in the drawings, the flexible golf tee 10 of the present invention generally includes a sleeve member 20, and a tee member 40. The sleeve member 20 having a first end 22, and a second end 24 opposite the first end 22. As shown in Fig. 2, the sleeve member 20 further includes a cavity 26 disposed within the sleeve member 20, and an aperture 28 formed at the first end 22 for assessing the cavity 26. As will be understood, the cavity 26 and the aperture 28 of the sleeve member 20 are generally shaped and sized to receive a stem portion 42 of the tee member 40. As will be further understood, the cavity 26 is disposed within the sleeve member 20 so that the tee member 40 is supported in a stable, elevated position within the cavity 26 of the sleeve member 20.

The second end 24 of the sleeve member 20 has a pointed base section 29 that is used to insert the flexible golf tee 10 into the ground 100 as shown in Fig. 3.

The sleeve member 20 further includes a crimped portion 30 formed at the approximate midway of the length of the sleeve member 20. The crimped portion 30 enables the golf tee 10 to flex or bend at impact. In particular, as shown in Fig. 3, and as will be further described, the golf tee 10 will flex at the location of the crimped portion 30 when the golf club strikes the golf ball thereby reducing the friction between the golf tee 10 and the golf ball at impact.

The tee member 40 includes the stem portion 42 and further includes a circular head portion 45 having a ball-supporting surface 47 which the golf ball is positioned thereon. As shown in the drawings, the stem portion 42 of the tee member 40 is received through the aperture 28 of the sleeve member 20 and tightly received within the cavity 26. Alternatively, the pointed stem portion of the standard golf tee may be inserted within the cavity 26 as described above in place of the tee member 40. A close fit exists between the stem portion 42 of the tee member 40 and the interior surface of the cavity 26 so that the tee member 40 is supported in a stable, elevated position within the cavity 26. As illustrated, the shape of the tee member 40 is substantially identical to that of the standard golf tee.

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In the preferred embodiment, the tee member 40 may be formed of known materials including wood or plastic. The sleeve portion 20 is of resilient but flexible material such as rubber or of thermoplastic material, which will endure repeated striking with the golf club, and will absorb the shock at impact with the golf club, as will be further discussed.

In use, the golfer inserts the stem portion 42 of the tee member 40 into the cavity 26 of the sleeve member 20 as discussed, so that the tee member 40 is supported in a stable, elevated position from the sleeve member 20. The golfer then inserts the pointed base section 29 of the sleeve member 20 into the ground 100. The user then places the golf ball on the ball-supporting surface 47 of the tee member 40. The tee member 40, as well as the golf ball are supported by the sleeve portion 20 in a stable, elevated position.

When the gollf club head strikes the golf ball, a forward edge 48 (shown in Fig. 3) of the ball-supporting surface 47 impedes the ball. Application of the flexible golf tee 10 as described above results in minimizing the resistance or friction between the forward edge 48 of the tee member 40 and the golf ball at impact. The reason is, at impact, the golf ball in effect flattens, and its diameter increases in a plane perpendicular to the hitting surface of the golf club head. This means that the golf ball pushes downward against the standard golf tee, driving it into the ground. But at the same time that the golf ball is being deformed it is also accelerating along its upward trajectory and rising upward as it moves horizontally. This causes the golf ball as a whole, including the lower surface to move upward, counteracting the downward push on the standard golf tee caused by deformation.

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The initial downward push generally tends to rock the standard golf tee counterclockwise by pushing on the leading rim of the circular head; however, when applying the flexible golf tee 10, the said initial downward push at impact will cause the crimped portion 30 of the sleeve member 20 to flex or bend as shown in Fig. 3, causing the golf ball to engage a trailing rim 49 of the ball-supporting surface 47 more than it would otherwise. By the time that the golf ball touches the trailing rim 49 it is moving backward, which rocks the golf tee 10 clockwise and cancels the counter-clockwise rotation; moreover the golf ball by this time is spinning counter-clockwise. The net effect is reduced friction and therefore less rotation from the golf ball to the ball-supporting surface 47 of the golf tee 10.

As described above, since the crimped portion 30 of the sleeve member 20 of the golf tee 10 will flex or bend at impact, the friction of the golf ball is reduced, making the striking direction of the golf ball more accurately controlled. In short, the present invention allows the golf club to determine the spin, not the golf tee.

Further, as previously discussed, the golf ball will flatten under the force of impact and, with a conventional golf tee, the golf club will hit the golf tee while it is still in contact

- with the golf ball. Since the standard golf tee is light, the effect is not great; but it is negligible. The work required to dislodge the standard golf tee and fling it away is that much less energy available to propel the golf ball, and the distance driven is therefore reduced.
- In the present invention the crimped portion 30 of the flexible sleeve member 20 ensures that the golf tee 10 will in effect flex at impact. Therefore the golf club is not slowed by hitting the golf tee 10 during its contact with the ball, and less energy is lost. As result, the golf ball travels farther.
- Although the description above contains many specificities, these should not be construed as limiting the scope of the invention but as merely providing illustrations of some of the presently preferred embodiments of this invention. For example, while the application above describes the tee member 40 and sleeve member 20 as two separate pieces, it is understood that the tee member 40 may be integral to the sleeve member 20 when manufactured. Further, while the above disclosure describes the tee member 40 inserted within the cavity 26 of the sleeve member 20, it is understood the standard tee may be used as well. In particular, the pointed stem portion of the standard tee may be received through the aperture 28 of the sleeve member 20 into the cavity 26.
- Thus the scope of the invention should be determined by the appended claims in the formal application and their legal equivalents, rather than by the examples given.